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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,992	02/20/2002	David J. Chaiko	051583-0260	6129

23524 7590 04/30/2004

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MADISON, WI 53701-1497

EXAMINER
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WYROZEBSKI LEE, KATARZYNA I

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 04/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/078,992	<b>Applicant(s)</b> CHAIKO, DAVID J.	
	<b>Examiner</b> Katarzyna Wyrozebski Lee	<b>Art Unit</b> 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

In view of applicant's amendment following final office action is necessitated. The examiner thanks the applicant's for short interview during which discussed was the "sub-monomolecular" character of the composition.

In view of the applicant's arguments and amendment to the claim the prior art of ROSS as applied against present claims is hereby overcome, since the prior art of ROSS does not teach average molecular weight of less than 5000. The smallest intercalating polymer in the disclosure of ROSS had molecular weight of 8,000.

Applicant's arguments also overcome 112 rejections of record and claim objections.

***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-9, 14-22, 27-35 are rejected under 35 U.S.C. 102(b) as being anticipated by CHAIKO (US 6,172,121).

The discussion of the disclosure of the prior art of CHAIKO from paragraph 5 of the office action mailed on 11/17/2003 is incorporated here by reference.

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 10-13, 23-26, 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHAIKO (US 6,172,121) in view of FERRARO (US 5,837,763).

The discussion of the disclosure of the prior art of CHAIKO and FERRARO from paragraph 9 of the office action mailed on 11/17/2003 is incorporated here by reference.

In the response filed on 2/19/2004 the applicant's argued following:

a) The prior art of CHAIKO discloses clay component that is completely covered by organic component.

With respect to the above argument, the examiner would like to draw applicant's attention to the Summary of the Invention section of the prior art of CHAIKO. There, in col. 4, lines 18-21, the prior art of CHAIKO teaches that the organoclays contain 20-30 wt % or less of the organic component. Therefore, if the ratio organic component to clay is so low, the surfaces of the clay will not be completely covered. There is also no indication in CHAIKO that such process would yield clay platelets having more than one layer of organic component.

b) The applicants further argued that the present invention requires that only 0.1-15 wt % of hydrotrope is adsorbed onto the clay surface.

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With respect to the above argument, this may be true for claim 14. Claim 1 however is much broader in nature and covers anything from 0.1 wt% to 99.9 wt % of covered surface. The prior art of CHAIKO further teaches the amounts smaller than 20 wt% of organic component.

c) The examiner has not established *prima facie* obviousness in order to properly combine the prior art of CHAIKO and FERRARO.

Finding obviousness does not require existence of express, written motivation to combine in prior art" 69 USPQ2D 1686 Ruiz v. A.B. Chance Co. The two prior art disclosures are in the same field of endeavor, which clay intercalates and exfoliates. Therefore the *prima facie* case of obviousness has been established, even if for different reasons than those of applicants.

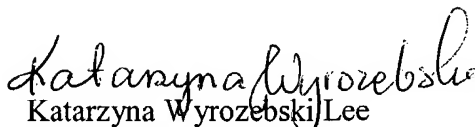
2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski Lee whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Katarzyna Wyrozebski Lee  
Primary Examiner  
Art Unit 1714

April 29, 2004